



# State of Nevada – Department Of Personnel

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## CLASS SPECIFICATION

<u>TITLE</u>	<u>GRADE</u>	<u>EEO-4</u>	<u>CODE</u>
<b>CHIEF ENGINEER, PLANT OPERATIONS</b>	<b>44*</b>	<b>A</b>	<b>6.106</b>
<b>OPTION: A. DEPARTMENT OF ADMINISTRATION</b>			
<b>B. DEPARTMENT OF CORRECTIONS</b>			

Under general direction, perform professional engineering work involved in maintaining and operating major and complex statewide facilities within either the Department of Administration or the Department of Corrections; manage construction projects; develop design, negotiate, review and modify contracts, agreements, engineering plans and specifications, and engineering schedules; manage a maintenance staff.

The Chief Engineer, Plant Operations within each option performs professional engineering functions that require analysis involving the application of advanced principles and abstract concepts in the development of unique solutions to difficult problems that impact the administration and management of major, broad organizational services and long and short range goals. Activities consist of duties that result in decisions and provide control of outcome of decisions. Incumbents deal with executives, officials and regulatory representatives for the purpose of negotiating solutions to major issues involving the influence of policy and procedure changes.

Plan, organize, schedule and oversee plant maintenance/operations activities by providing professional engineering expertise to the department; writing, reviewing, negotiating and securing agreements with consultants and/or contractors and coordinating their activities; compiling and presenting complex professional engineering information to management; and preparing reports, letters, memos, agreements, forms and notes to communicate information to others.

Ensure preventive and corrective maintenance is performed in a timely manner by inspecting each facility, advising on technical problems, locating necessary funding, inspecting the work of outside contractors and setting up maintenance schedules.

Perform supervisory duties to include assigning and reviewing work; reviewing and approving time sheets, conducting employee evaluations; determining training needs and implementing training activities; and forecasting staffing needs.

Assist in budget development by recommending maintenance/operational needs and other pertinent cost factors to include equipment replacement, impending regulatory upgrades, safety equipment, remedial work, etc.

Perform related duties as assigned.

### **OPTION A - Department of Administration**

Provide professional engineering services to the department by reviewing project plans to ensure compliance to applicable codes; writing specifications of project plans to ensure minimum acceptable standards; reviewing plans and specifications to ensure correctness of document; sealing, signing and dating completed plans; advising inspectors of acceptable installation methods; and approving payments to contractors.

**\*Reflects a 2-grade, special salary adjustment authorized by the 2001 Legislature to improve recruitment and retention.**

**OPTION A - Department of Administration** (cont'd)

Manage energy consumption and utility costs by tracking statewide utility accounts of buildings and sites within the department; recommending capital improvement projects or in-house projects that initiate energy and cost reduction; and establishing department standards for new construction projects for Public Works Board and in-house designs to eliminate resource waste and improve quality of construction.

Oversee the management of all department water rights to ensure that water right permits and certificates are in good standing; design improvements to control and manage the system; compile data of pumping operations for specific systems to ensure proper billing for services; and survey dam sites, roads and pipelines for new and existing facilities improvement.

**OPTION B: Department of Corrections**

Oversee the maintenance, health, safety, fire and environmental programs for the department to ensure all facilities are in compliance with department, State and federal regulations. This involves performing in-house inspections; providing for outside regulatory agency inspections; providing training to department employees; taking corrective measures when deficiencies exist; and working with regulatory personnel to improve these programs within the department.

Manage capital improvement and department funded projects to include construction, equipment replacement and remodeling of all correctional facilities. This involves serving as part of a consultant's design team for budgeting, scheduling and designing capital improvement projects; recommending capital improvement candidate projects; overseeing construction and resolving contractor questions; and performing final inspection to ensure project is complete before releasing contractor from the project.

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**MINIMUM QUALIFICATIONS**

**SPECIAL NOTES AND REQUIREMENTS:**

- \* Registration as a professional engineer in Nevada is required at the time of appointment. Any person registered as a Professional Engineer in another state must become registered as a Professional Engineer in Nevada within six months following the date of appointment as a condition of employment.

**BOTH OPTIONS**

**EDUCATION AND EXPERIENCE:** Bachelor's degree from an accredited college or university in civil engineering or a closely related engineering degree (i.e., structural engineering, mechanical engineering) and five years of professional engineering experience of which two years must have been in a supervisory or responsible project charge capacity in the operations and maintenance of a large physical plant; **OR** an equivalent combination of education and experience. (*See Special Notes and Requirements*)

**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES** (required at time of application):

**BOTH OPTIONS**

**Detailed knowledge of:** the practical application of calculus, algebra, geometry, fractions, percentages, ratios and proportions, scientific notation and statistics. **Working knowledge of:** engineering principles and practices; the principles of engineering project plans, specification and drafting methods including nomenclature, symbols, and sources of information; estimating methods of plumbing, heating, air

**MINIMUM QUALIFICATIONS** (cont'd)

**ENTRY LEVEL KNOWLEDGE, SKILLS AND ABILITIES** (cont'd):

**BOTH OPTIONS** (cont'd)

conditioning and refrigeration systems. **Knowledge of:** operating cost, maintenance cost, insurance cost, labor requirements and cost, and equipment cost of various systems; economic analysis for projecting the useful life of various systems and indicate least cost and/or energy consumption; Uniform Plumbing Code, Uniform Mechanical Code, federal regulations, State statutes, and local ordinances regarding life safety, energy, materials, equipment and installation standards for building systems; computer controlled heating, ventilation and air conditioning systems to make determinations of alarms, trends, set points, operating hours, demand limits. **Ability to:** write technical specifications to complement plans in compliance with applicable codes; apply the principles of engineering; work independently and follow through on assignments with minimal direction; supervise including organizing workflow to accomplish established objectives, delegating responsibility, challenging subordinates to grow, training and administering necessary discipline; stay current with technical advances and apply technical procedures; set priorities which accurately reflect the relative importance of job responsibilities.

**FULL PERFORMANCE KNOWLEDGE, SKILLS AND ABILITIES** (typically acquired on the job):

**BOTH OPTIONS**

**Detailed knowledge of:** Uniform Plumbing Code, Uniform Mechanical Code, Fire Codes, etc., that apply to a particular building or system including federal, State and municipal requirements; mechanical systems, including power, water, gas requirements, with associated weights and sizes to approximate mechanical system impact on a new construction project; buildings under the jurisdiction of the department to include the operating schedules of the facility, the personnel within those facilities, and the mechanical and electrical equipment within those facilities; the design of the existing systems and how they are operated and controlled; correct maintenance and safety procedures to implement more efficient operating procedures; Public Works Board's Capital Improvement Projects' process and legislative process to fund projects; cost estimating of heating, ventilation, air conditioning and electrical systems for new or existing buildings. **Ability to:** write technical details and cost estimates of a project to enable the Public Works Board and their staff to bid on a project and to recommend funding; analyze systems, operating hours and determine how these factors affect the cost to operate the buildings; prioritize and make assignments to complete work in a timely manner when there are changes in importance, pressures of deadlines, competing requirements and a heavy workload; negotiate, exchange ideas, information and opinions with others to formulate policies and programs and/or arrive jointly at decisions, conclusions or solutions; evaluate the qualifications of a job applicant in comparison with the job requirements; analyze complex technical data using logic and quantitative reasoning. **Skill in:** drafting mechanical drawings to scale using symbols, written instructions and dimensions in mark-up plans to clearly instruct drafting personnel for final drawing sheets.

**OPTION B: Department of Corrections**

**Knowledge of:** institutional security measures; all regulatory criteria in a correctional setting.

This class specification is used for classification, recruitment and examination purposes. It is not to be considered a substitute for work performance standards for positions assigned to this class.

6.106

ESTABLISHED:	11/25/80R
	6/1/85PAC
REVISED:	7/1/89R
	9/22/89PC
REVISED:	7/1/91P
	11/29/90PC
REVISED:	7/1/93P
	8/31/92PC
REVISED:	9/1/94UC
REVISED:	6/29/95UC
REVISED:	7/1/01LG